

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) A communication device comprising:

wired communication means for providing/receiving data via physical connection means to/from a mounted host equipment;

short distance radio communication means for transmitting/receiving data to/from an external communication network via a short distance radio communication network;

storage means in which communication setting information ~~is stored~~ as information related to the communication network, and at least protocols of an upper protocol layer and protocols of a lower protocol layer are stored; and

communication control means for setting a connection relation with the communication network via the short distance radio communication network ~~on a basis of using the protocols of the lower protocol layer based upon~~ the communication setting information stored in the storage means, and controlling transmission/reception of data between the communication network and the host equipment using at least one protocol of the upper protocol layer, wherein

the lower protocol layer includes protocols for communication in the short distance radio communication network; and

the upper protocol layer includes at least one protocol

of point to point (PPP), Internet protocol (IP), and transport control protocol (TCP) for communication with the external communication network.

Claim 2 (Previously Presented) The communication device as claimed in claim 1, wherein individual information is stored in the storage means as information related to a user operating the host equipment, and

wherein the communication control means sets the connection between the host equipment and the communication network by using the communication setting information and the individual information stored in the storage means.

Claim 3 (Canceled).

Claim 4 (Currently Amended) The communication device as claimed in claim [[3]] 1, further comprising

discrimination means for discriminating whether to set the connection between the host equipment and the communication network by using at least one protocol of PPP (point to point protocol), IP (Internet protocol), and TCP (transport control protocol) stored in the host equipment and carry out transmission/reception of data between the host equipment and the communication network, or to set the connection between the host equipment and the communication network by using at least one protocol stored in the storage means and carry out transmission/reception of data between the host equipment and the communication network,

wherein in accordance with a result of discrimination

that the connection between the host equipment and the communication network is set by using at least one protocol stored in the storage means and that transmission/reception of data is carried out between the host equipment and the communication network, the communication control means sets the connection between the host equipment and the communication network by using at least one protocol stored in the storage means and controls transmission/reception of data between the host equipment and the communication network.

Claim 5 (Previously Presented) The communication device as claimed in claim 2, wherein the communication control means discriminates whether the individual information stored in the storage means is usable by using password information inputted from the host equipment, and sets the connection between the host equipment and the communication network on a basis of a result of discrimination.

Claim 6 (Previously Presented) The communication device as claimed in claim 1, wherein the storage means temporarily stores data inputted from the host equipment via the wired communication means, and

wherein the communication control means carries out control so as to transmit/receive the data temporarily stored in the storage means to/from the communication network.

Claim 7 (Previously Presented) The communication device as claimed in claim 1, wherein

the communication control means sets a connection

relation between a public communication network and the host equipment and controls transmission/reception of data between the host equipment and the public communication network.

Claim 8 (Currently Amended) A communication method for a communication device having a wired communication section for supplying/receiving data to/from a host equipment via physical contact means and a short distance radio communication section for transmitting/receiving data to/from an external communication network via a short distance radio communication network, the method comprising the steps of:

storing communication setting information as information related to the communication network, protocols of an upper protocol layer, and protocols of a lower protocol layer in the communication device;

using protocols of the lower protocol layer to set a connection relation between the radio communication section and the communication network via the short distance radio communication network based upon the communication setting information stored in the communication device as information related to a communication network outside the short distance radio communication network, so as to set a connection relation between the radio communication section and the communication network via the short distance radio communication network; and

carrying out transmission/reception of data between the communication device and the communication network by using the connection relation between the communication device and the communication network, and carrying out supply/reception

of data between the host equipment and the communication device, ~~thus controlling~~ using at least one protocol of the upper protocol layer to control transmission/reception of data between the host equipment and the communication network, wherein

the lower protocol layer includes protocols for communication in the short distance radio communication network; and

the upper protocol layer includes at least one protocol of point to point (PPP), Internet protocol (IP), and transport control protocol (TCP) for communication with the external communication network.

Claim 9 (Previously Presented) The communication method as claimed in claim 8, wherein a connection relation between the host equipment and the communication network is set by using individual information stored in the communication device, wherein

The individual information is information related to a user operating the host equipment.

Claim 10 (Canceled).

Claim 11 (Currently Amended) The communication method as claimed in claim ~~10~~ 8, wherein

it is discriminated whether to set the connection relation between the host equipment and the communication network by using at least one protocol of PPP (point to point protocol), IP (Internet protocol), and TCP (transport control

protocol) stored in the host equipment and carry out transmission/reception of data between the host equipment and the communication network, or to set the connection relation between the host equipment and the communication network by using at least one protocol stored in the communication device and carry out transmission/reception of data between the host equipment and the communication network, and

wherein in accordance with a result of discrimination that the connection relation between the host equipment and the communication network is set by using at least one protocol stored in the communication device and that transmission/reception of data is carried out between the host equipment and the communication network, the connection relation between the host equipment and the communication network is set by using at least one protocol stored in the communication device and transmission/reception of data is carried out between the host equipment and the communication network.

Claim 12 (Previously Presented) The communication method as claimed in claim 9, wherein it is discriminated whether the individual information is usable by using password information inputted from the host equipment to the communication device, and

wherein the connection relation between the communication device and the communication network is set on a basis of a result of discrimination.

Claim 13 (Original) The communication method as claimed

in claim 8, wherein data inputted from the host equipment to the communication device is stored, and

wherein transmission/reception of the stored data is carried out between the communication device and the communication network.

Claim 14 (Original) The communication method as claimed in claim 8, wherein a connection relation between a public communication network and the communication device is set, and

wherein transmission/reception of data is carried out between the public communication network and the host equipment.

Claim 15 (Currently Amended) A communication device comprising:

wired communication means for providing/receiving data via physical contact means to/from a mounted host equipment;

short distance radio communication means for providing/receiving data to/from an external communication network via a short distance radio communication network;

storage means in which communication setting information ~~is stored~~ as information related to the communication network and at least protocols of an upper protocol layer and protocols of a lower protocol layer are stored; and

communication control means for setting a connection relation with the communication network via the short distance radio communication network ~~on a basis of~~ using protocols of the lower protocol layer based upon the communication setting information stored in the storage means, and controlling

transmission/reception of data between the communication network and the host equipment[[]] using at least one protocol of the upper protocol layer, wherein

the wired communication means, the short distance radio communication means, the storage means, and the communication control means ~~being~~ are housed in a single casing;

~~wherein~~ the wired communication means is arranged on one side of the communication control means, and the short distance radio communication means is arranged on the other side of the communication control means

the lower protocol layer includes protocols for communication in the short distance radio communication network; and

the upper protocol layer includes at least one protocol of point to point (PPP), Internet protocol (IP), and transport control protocol (TCP) for communication with the external communication network.

Claim 16 (Currently Amended) The communication device as claimed in claim 15, wherein

the casing is ~~in a plate like shape~~ substantially rectangular, having a height greater than a width, and a thickness smaller than the width, and

wherein the short distance radio communication means is arranged on ~~one~~ a first end of the casing, and the wired communication means is arranged on ~~another~~ a second end of the casing.

Claim 17 (Currently Amended) The communication device as



claimed in claim 16, wherein a thickness of the casing is greater on the ~~ether~~ second end than on the ~~one~~ first end.

Claim 18 (Currently Amended) . A communication device comprising, in a casing constituted to have a predetermined outer dimension that allows free attachment/detachment of at least a part thereof to/from a recessed connection part provided in a mounted host equipment:

wired communication means for providing/receiving data via physical contact means to/from the host equipment;

short distance radio communication means for providing/receiving data to/from an external communication network via a short distance radio communication network;

storage means in which communication setting information ~~is stored~~ as information related to the communication network, and at least protocols of an upper protocol layer and protocols of a lower protocol layer are stored; and

communication control means for setting a connection relation with the communication network via the short distance radio communication network ~~on a basis of~~ using the protocols of the lower protocol layer based upon the communication setting information stored in the storage means, and controlling transmission/reception of data between the communication network and the host equipment using at least one protocol of the upper protocol layer, wherein

the lower protocol layer includes protocols for communication in the short distance radio communication network; and

the upper protocol layer includes at least one protocol

of point to point (PPP), Internet protocol (IP), and transport control protocol (TCP) for communication with the external communication network.

Claim 19 (Currently Amended) The communication device as claimed in claim 18, wherein

the casing is ~~in a plate like shape~~ substantially rectangular, having a height greater than a width, and a thickness smaller than the width, and

wherein the short distance radio communication means is arranged on ~~one~~ a first end of the casing, and the wired communication means is arranged on ~~another~~ a second end of the casing.

Claim 20 (Previously Presented) The communication device as claimed in claim 19, wherein the casing is connected to the recessed connection part of the host equipment, with the other end exposed outside from the host equipment.

Claim 21 (Currently Amended) The communication device as claimed in claim 19, wherein the short distance radio communication means includes a chip antenna shaped in a ~~plate-like~~ thin, substantially rectangular form and carries out transmission/reception of data to/from the short distance radio communication network via the chip antenna.

Claim 22 (Currently Amended) The communication device as claimed in claim 21, wherein the chip antenna is housed in the ~~other~~ second end of the casing having a protrusion with its

thickness greater ~~than~~ at the ~~other~~ second end than the ~~one~~ first end.

Claim 23 (Currently Amended) A communication terminal device comprising:

public communication connection means operated by a user so as to be connected to a public communication network for providing/receiving data;

short distance radio communication means for transmitting/receiving data to/from an equipment included in a short distance radio communication network via the short distance radio communication network;

communication setting information storage means in which communication setting information is stored as information related to an external communication network to be connected via the public communication network along with protocols of an upper protocol layer and protocols of a lower protocol layer;

communication connection setting means for setting connection with the communication network via the public communication network by using protocols of the lower protocol layer based upon the communication setting information stored in the communication setting information storage means; and

control means for controlling transmission/reception of data between the equipment and the communication network by using the connection with the communication network set by the communication connection setting means and by using at least one protocol of the upper protocol layer, wherein

the lower protocol layer includes protocols for

communication in the short distance radio communication network; and

the upper protocol layer includes at least one protocol of point to point (PPP), Internet protocol (IP), and transport control protocol (TCP) for communication with the external communication network.

Claim 24 (Previously Presented) The communication terminal device as claimed in claim 23, further comprising individual information storage means in which individual information is stored as information related to the user, wherein the communication connection setting means sets the connection between the short distance radio communication means and the communication network by using the communication setting information stored in the communication setting information storage means and the individual information stored in the individual information storage means.

Claim 25 (Canceled).

Claim 26 (Currently Amended) The communication terminal device as claimed in claim 25 23, further comprising discrimination means for discriminating whether to set the connection between the short distance radio communication means and the communication network by using at least one protocol of PPP (point to point protocol), IP (Internet protocol), and TCP (transport control protocol) stored in the equipment and carry out transmission/reception of data between the equipment and the communication network, or to set

connection between the short distance radio communication means and the communication network by using at least one protocol stored in the communication setting information storage means and carry out transmission/reception of data between the equipment and the communication network,

wherein in accordance with a result of discrimination that the connection between the short distance radio communication means and the communication network is set by using at least one protocol stored in the communication setting information storage means and that

transmission/reception of data is carried out between the equipment and the communication network, the communication connection setting means sets the connection between the short distance radio communication means and the communication network by using at least one protocol stored in the communication setting information storage means, and the control means controls transmission/reception of data between the equipment and the communication network by using at least one protocol stored in the communication setting information storage means.

Claim 27 (Previously Presented) The communication terminal device as claimed in claim 24, further comprising password processing means for discriminating whether the individual information stored in the individual information storage means is usable by using a password inputted from the equipment,

wherein the communication connection setting means sets the connection with the communication network via the public

communication network on a basis of a result of discrimination from the password processing means.

Claim 28 (Previously Presented) The communication terminal device as claimed in claim 23, further comprising data storage means for storing data inputted from equipment via the short distance radio communication means, wherein the control means controls transmission/reception of the data stored in the data storage means to/from the communication network.

Claim 29 (Previously Presented) The communication terminal device as claimed in claim 28, wherein the control means controls processing to set the connection again, in response to discrimination that the communication connection setting means cannot establish setting of connection with the communication network, and transmits/receives the data stored in the data storage means to/from the communication network.